

## New herbicide controls hard-to-kill weeds, could be paired with resistant GMO crops

[Purdue University](#) researchers have developed a compound effective for controlling weeds that is also safe for people and the environment. They also developed a simple system for farmers to create plants resistant to this new herbicide.

....“The herbicide we developed can contribute to global food production and security, and is expected to be safer for the environment than conventional herbicides because of its selective nature,” [said Chunhua Zhang, an assistant professor of botany and plant pathology in [Purdue University’s College of Agriculture](#).]

The Purdue herbicide targets and kills broad weed species while not affecting crop plants that carry the resistance to the herbicide.

“There have been no new herbicides with novel models of action developed for decades in the world herbicide market,” Zhang said. “We identified a new small molecule that could target the conserved catalytic site of an enzyme that is required for plant growth.”

The Purdue team....also found that by changing a single nucleotide in the gene encoding the enzyme, they could easily produce crop varieties that are resistant to the new herbicide.

**Read full, original article:** [In the weeds: A new approach to keeping crops, people safe](#)